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(71) Applicant (for all designated States except US): AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 10 Science Park Road, #01/01-03 The Alpha, Singapore Science Park II, 117684 SG (SG).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): ZHENG, Yuankai [CN/SG]; Block 24, Teban Gardens Road, #09-168, 600024 SG (SG). WU, Yihong [SG/SG]; Block 10, Dover Rise, #17-09, 138680 SG (SG).

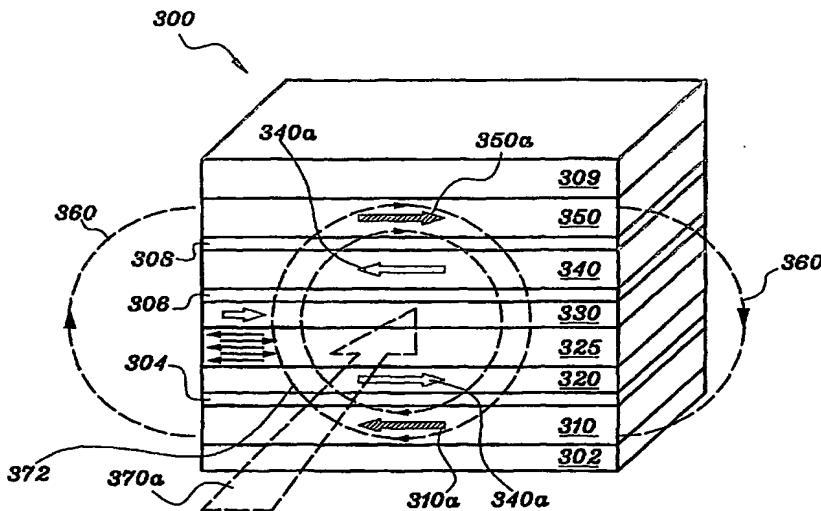
(74) Agent: ALLEN & GLEDHILL; 36 Robinson Road, #18-01 City House, 068877 SG (SG).

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(54) Title: MAGNETIC MEMORY DEVICE



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(57) Abstract: A memory cell for a magnetic memory device comprising a first hard magnetic later having a first fixed magnetization vector; a second hard magnetic later having a second fixed magnetization vector; a first soft magnetic layer having a first alterable magnetization vector and disposed adjacent to the first hard magnetic layer and a second soft magnetic layer having a second alterable magnetization vector and disposed adjacent to the second hard magnetic layer, the first and the second soft magnetic layers are magnetostatically coupled antiparallel to each other to form a flux-closed structure. An electrically conductive layer is disposed between the two soft magnetic layers for passing an electric current therethrough to perform the read and write operations. A magnetic memory device made thereof possesses a higher thermal stability against external thermal fluctuations and in the meantime has a lower power dissipation in writing operations.